CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE LOWER CLINCH RIVER WATERSHED

- 4.1 Background.
- 4.2. Characterization of HUC-10 Subwatersheds
 - 4.2.A. 0601020701 (Clinch River)
 - 4.2.B. 0601020702 (Bull Run Creek)
 - 4.2.C. 0601020703 (Beaver Creek)
 - 4.2.D. 0601020705 (Poplar Creek)
- **4.1. BACKGROUND.** This chapter is organized by HUC-10 subwatershed, and the description of each subwatershed is divided into four parts:
 - i. General description of the subwatershed
 - ii. Description of point source contributions
 - ii.a. Description of facilities discharging to water bodies listed on the 2002 303(d) list
 - iii. Description of nonpoint source contributions

The Lower Clinch River Watershed (HUC 06010207) has been delineated into four HUC 10-digit subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

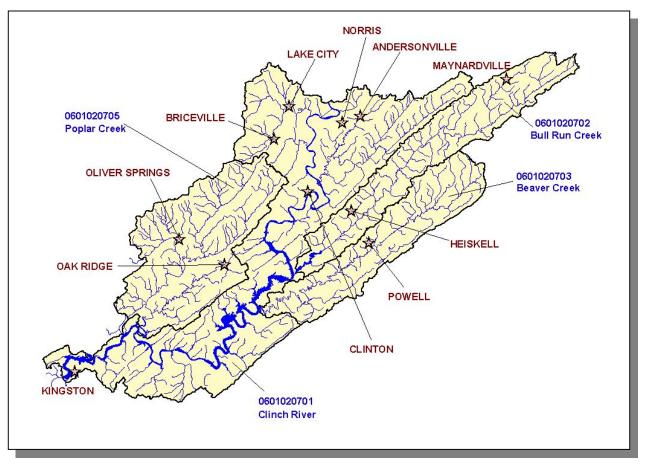


Figure 4-1. The Lower Clinch River Watershed is Composed of Four USGS-Delineated Subwatersheds (10-Digit Subwatersheds). Locations of Andersonville, Clinton, Heiskell, Kingston, Lake City, Maynardville, Norris, Oak Ridge, Oliver Springs, and Powell are shown for reference.

4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Lower Clinch River Watershed.

| HUC-10 | HUC-12 |
|------------|---------------------------------------|
| 0601020701 | 060102070101 (Clinch River) |
| | 060102070102 (Hinds Creek) |
| | 060102070103 (Clinch River) |
| | 060102070104 (Clinch River) |
| | 060102070105 (Clinch River) |
| | |
| 0601020702 | 060102070201 (Upper Bull Run Creek) |
| | 060102070202 (Lower Bull Run Creek) |
| | |
| 0601020703 | 060102070301 (Upper Beaver Creek) |
| | 060102070302 (Lower Beaver Creek) |
| | |
| 0601020705 | 060102070501 (Upper Poplar Creek) |
| | 060102070502 (Lower Poplar Creek) |
| | 060102070503 (East Fork Poplar Creek) |

Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages. NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.